

INVITATION TO BID

Bid Number: 202111 Simulators for Nursing Program at Mid City
Bids Will Be Publicly Opened: Tuesday, June 3, 2021 at 10:00 a.m. CST
Bid Release Date: May 7, 2021



INSTRUCTION TO BIDDERS

- 1 **Bids will be accepted until June 3, 2021 at 9:00 a.m. Bid must be submitted to: Baton Rouge Community College, 7515 Jefferson Highway #326, Baton Rouge, LA 70806. Due to the Covid 19 Situation Baton Rouge Community College (BRCC) will open all timely submitted sealed bids at its office located at 201 Community College Drive, Front Entrance Area, Governors Building, Baton Rouge, LA 70806, on June 3, 2021 at 10:00 a.m., in response to this Invitation to Bid. All Bids will be publicly opened and read aloud. Bidders attending the bid opening must wear masks and maintain social distancing of 6 feet.**
- 2 To ensure consideration of your Bid, all Bid Packages and addenda shall be returned in an envelope or package clearly marked with the Bid title, Bid opening date and the Bid number. **Baton Rouge Community College, 7515 Jefferson Highway #326, Baton Rouge, LA 70806 on or before June 3, 2021 at 9:00 a.m. CST . DO NOT FAX OR EMAIL YOUR BID.**3 All bid prices and information shall be typed or written in ink. Any corrections, erasures, or other forms of alteration to prices should be initialed by the Bidder.
- 3 All bid prices and information shall be typed or written in ink. Any corrections, erasures, or other forms of alteration to prices should be initialed by the Bidder.
- 4 Payment will be made within thirty (30) days after receipt of invoice, delivery, and authorized inspection and acceptance, whichever occurs last. Delinquent payment penalties are mandated and governed by Louisiana R.S. 39:1695.
- 5 Bids submitted are subject to provisions of the laws of the State of Louisiana including, but not limited to, La. Title 39: 1551-1736, Chapter 17; Purchasing Rules and Regulations (Title 34 of the Louisiana Administrative Code); Executive Orders; and the terms conditions, and specifications listed in this solicitation.
- 6 Bids shall be signed by a person authorized to bind the vendor in accordance with L.R.S. 39:1594. SEE No. 25.
- 7 By signing this Invitation to Bid, the Bidder certifies compliance with all Instructions to Bidders, terms, conditions, and specifications and further certifies that this Bid is made without collusion or fraud.
- 8 By signing and submitting any bid for \$25,000 or more, the bidder certifies that their company, any subcontractors, or principals are not suspended or debarred by the General Services Administration (GSA) in accordance with the requirements in "Audit Requirements in Subpart F of the Office of Management and Budget's Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards" (Formerly OMB Circular A-133). A list of parties who have been suspended or debarred can be viewed at www.sam.gov .

Signature of Authorized Bidder:
(Shall be signed and dated)

Company:
(Typed or printed)

Name, (Typed or Printed)

Address

City, State, Zip

Payment Terms: _____

Telephone No. _____

Email Address: _____

Fax No. _____

STANDARD TERMS AND CONDITIONS

- 1 Bid form.
All written Bids shall be submitted on the Bid Forms provided and in accordance with the Bid package and, properly signed. Bids submitted in the following manner will not be accepted:
 - A. Bid Instructions and Bid Forms contain no signature indicating intent to be bound;
 - B. Bid filled out in pencil;
 - C. Bid not submitted on BRCC's standard Bid Package and Bid Form.
 - D. Telegraphic or facsimile bids.
- 2 Receipt of Bids.
Bids shall be received at the address specified in this Invitation prior to Bid opening time in order to be considered. Entire Bid Packages shall be returned. Bidder is solely responsible for ensuring that its courier service provider makes inside deliveries to the physical location specified. BRCC is not responsible for any delays caused by the bidder's chosen means of bid delivery. BRCC is not responsible for late deliveries that make use of BRCC's interoffice mail service.
- 3 Bid Opening.
Bidders may attend the Bid opening, but no information or opinions concerning the ultimate contract award will be given at the Bid opening or during the evaluation process. Bids may be examined within 72 hours after Bid opening. Information pertaining to completed files may be secured by visiting the Purchasing Department during normal working hours. Unsuccessful bidders submitting a response to the solicitation will be provided a copy of the tabulated results by providing a self-addressed stamped envelope with the original bid package.
- 4 Withdrawal of Bids.
A bidder may only withdraw a bid within forty-eight (48) hours after a bid opening, excluding Saturdays, Sundays and legal holidays, for good cause as for patently obvious, unintentional, and substantial mechanical, clerical, or mathematical errors, or errors of unintentional omission of a substantial quantity of work, labor, material or services made directly in the compilation of the bid. The bid may be withdrawn by contacting BRCC's Purchasing Department.
- 5 Standards of Quality.
Any product or services bid shall conform to all applicable federal and state laws and regulations and the specifications contained in the solicitation. Unless otherwise specified in the solicitation, any manufacturer's name, trademark, brand name or catalog number used in the specifications is for the purpose of describing the standard of quality, performance, and characteristics desired and is not intended to limit or restrict competition. **Bidders shall specify the brand and model number of the product offered in his Bid.** Bids not specifying brand and model number shall be considered as offering the exact products specified in the solicitation. Objections to the specifications or bid conditions shall be filed in writing and received by the Purchasing Department at least ten (10) days prior to the date of the bid opening. No negotiations, decisions or actions shall be executed by any bidder as a result of any oral discussions with any BRCC employee or consultant. All products must be ADA compliant.
- 6 New Products.
Unless specifically called for in the Invitation, all products for purchase shall be new, never previously used, and the current model and/or packaging. No remanufactured, demonstrated, used or irregular product will be considered for purchase unless otherwise specified in the solicitation. The manufacturer's standard warranty will apply unless otherwise specified in the Invitation.
- 7 Descriptive Information.
Bidders proposing an equivalent brand or model should submit, with the Bid information, such illustrations, descriptive literature, technical data, etc. sufficient for BRCC's Purchasing Department to evaluate quality, suitability, and compliance with the specifications in the Invitation. Failure to submit descriptive information may cause bid to be rejected. Any change made to manufacturer's public specifications submitted for a product shall be verifiable by the manufacturer. If item(s) bid do not fully comply with specifications (including brand and/or product number), Bidder shall state in what respect item(s) deviate. Failure to note exceptions on the Bid form will not relieve the successful Bidder(s) from supplying the actual products requested.

- 8 **Prices & Delivery.**
Unless otherwise specified by BRCC in the Invitation, Bid prices shall be complete, including transportation prepaid by Bidder to destination and firm for acceptance for a minimum of 45 days. Prices are to be bid on unit of measure requested, per roll, per reel, per carton, per gallon, etc., as specified in the Invitation. If accepted, prices shall be firm for the contractual period.
- Bids other than Platform Delivery F.O.B. destination may be rejected. Platform Delivery FOB Destination means the successful bidder shall deliver and unload purchased items to the dock of the designated point of receipt. All cartage, drayage, packaging, handling, palletizing, etc. shall be included in the Bid price. Include a packaging list that includes the purchase order number with each shipment.
- Bids may be rejected if the delivery time indicated is longer than that specified in the Invitation.
- 9 **Taxes.**
Vendor is responsible for including all applicable taxes in the Bid Price. BRCC is exempt from all state and local sales and use taxes.
- 10 **Award.**
A purchase order/contract will be awarded to the Bidder who has provided a responsive and responsible Bid at the most favorable Bid Price as determined by the signed Bid Form.
- BRCC reserves the right to award items separately, grouped or on an all-or-none basis and to reject any or all Bids and waive any informalities. The purchase order, faxed, mailed, or delivered to the successful bidder is the official authorization to deliver the materials, supplies or equipment.
- 11 **Invoices.**
Invoices shall be submitted to, Baton Rouge Community College, Accounts Payable, 201 Community College Drive, Baton Rouge, Louisiana, 70806. The invoice shall refer to the delivery ticket number, delivery date, purchase order number, quantity, unit price, and deliver point. A separate invoice for each order delivered and accepted shall be submitted by the contractor in duplicate. Invoices shall show the amount of any cash discount and shall be submitted on the contractor's own invoice form. Payment will be made on the basis of the unit price as listed in the purchase order/contract. Such price and payment will constitute full compensation of furnishing and delivering the contract commodities or services.
- 12 **Purchase Order/Contract Cancellation for Cause.**
BRCC has the right to cancel any contract, in accordance with its purchasing rules and regulations, for cause, including but not limited to, the following:
- (1) Failure to deliver within the time specified in the contract;
 - (2) Failure of the product or service to meet specifications, conform to sample quality or to be delivered in good condition;
 - (3) Misrepresentation by the contractor;
 - (4) Fraud, collusion, conspiracy or other unlawful means of obtaining any contract with BRCC;
 - (5) Conflict of contract provisions with constitutional or statutory provisions of state or federal law;
 - (6) Any other breach of contract.
- 13 **Termination of the Purchase Order/Contract for Convenience.**
BRCC may terminate the contract at any time by giving thirty (30) days written notice to the Contractor of such termination or by negotiating with the Contractor an effective date. The Contractor shall be entitled to payment for deliverables in progress, to the extent work has been performed satisfactorily.
- 14 **Termination for Non-Appropriation of Funds**
The continuance of the contract is contingent upon the appropriation of funds to fulfill the requirements of the contract by the legislature. If the legislature fails to appropriate sufficient monies to provide for the continuation of the contract, or if such appropriation is reduced by the veto of the Governor or by any means provided in the appropriations act or Title 39 of the Louisiana Revised Statutes of 1950 to prevent the total appropriation for the year from exceeding revenues for that year, or for any other lawful purpose, and the effect of such reduction is to provide insufficient monies for the continuation of the contract, the contract shall terminate on the date of the beginning of the first fiscal year for which funds are not appropriated.
- 15 **Default of Contractor.**

Failure to deliver within the time specified in the Bid will constitute a default and may cause cancellation of the contract. Where BRCC has determined the contractor to be in default, BRCC reserves the right to purchase any and all products or services covered by the contract on the open market and to charge the contractor with the cost in excess of the contract price. Until such assessed charges have been paid, no subsequent Bid from the defaulting contractor will be considered.

- 16 Order of Priority.
In the event there is a conflict between the Instructions to Bidder or Standard Terms and Conditions or Special Terms and Conditions, the Special Term and Conditions shall govern.
- 17 Applicable Law.
All contracts shall be construed in accordance with and governed by the laws of the State of Louisiana.
- 18 Terms and Conditions.
This solicitation contains all terms and conditions with respect to the commodities herein, any vendor contracts, forms, terms or other materials submitted with bid may cause bid to be rejected.
- 19 Equal Opportunity.
By submitting and signing the Bid, Bidder agrees that he will not discriminate in the rendering of services to and/or employment of individuals because of race, religion, sex, age, national origin, handicap or disability. Bidders shall keep informed of and comply with all Federal, State and local laws, ordinances and regulations which affect his employees or prospective employees.
- 20 Indemnity.
Contractor agrees, upon receipt of written notice of a claim or action, to defend the claim or action or to take other appropriate measures to indemnify, and hold harmless, BRCC and its employees from and against all claims and actions for bodily injury, death or property damages cause by the fault of a contractor, its officers, its agents, or its employees. Contractor is obligated to indemnify only to the extent of the fault of the contractor, its officers, its agents, or its employees. However, contractor shall have no obligation as set forth above with respect to any claim or action from bodily injury, death or property damages arising out of the fault of BRCC or its employees.
- 21 Non-Exclusivity Clause.
This agreement is non-exclusive and shall not in any way preclude BRCC from entering into similar agreements and/or arrangements with other vendors or from acquiring similar, equal or like goods and/or services from other entities or sources including state contracts.
- 22 Price Reductions.
Whenever there is a reduction in price which is lower than the contract price offered to similarly situated customers contracting for the same period and under similar terms and conditions, the reduction shall be presented to the Purchasing Department.
- 23 Preference of Louisiana Products.
In accordance with La. R.S. 39:1604 a preference claim may be made for materials, supplies equipment or products manufactured, produced, grown, or assembled in Louisiana of equal quality. To claim a preference, a Bidder shall fully comply with the requirements and conditions of law and complete the preference statement as part of the Bid Package. Preferences shall not apply to service contracts.

Claiming Preference.

Do you claim a preference? Yes _____ No _____

Specify Line Number(s) _____

Specify location within Louisiana where product is manufactured, produced, grown, or assembled: _____

Do you have a Louisiana business workforce? Yes _____ No _____

If so, do you certify that at least fifty percent (50%) of your Louisiana business workforce is comprised of Louisiana residents? Yes _____ No _____

Failure to specify above information may cause elimination of preference. Preferences shall not apply to service contracts.

Preference for United States Products.

In accordance with the provisions of R.S. 39:1604.7, in the event a contract is not entered into for products purchased under the provisions of R.S. 39:1604, each procurement officer, purchasing agent, or similar official who procures or purchases materials, supplies, products, provisions, or equipment under the provisions of this chapter may purchase such materials, supplies, products, provisions, or equipment which are manufactured in the United States, and which are equal in quality to other materials, supplies products, provisions, or equipment, provided that all of the following conditions are met:

- (1) The cost of such items does not exceed the cost of other items which are manufactured outside the United States by more than five percent.
- (2) The vendor of such items agrees to sell the items at the same price as the lowest bid offered on such items.
- (3) In cases where more than one bidder offers items manufactured in the United States which are within five percent of the lowest bid, the bidder offering the lowest bid on such items is entitled to accept the price of the lowest bid made on such items.
- (4) The vendor certifies that such items are manufactured in the United States.

For the purposes of this preference,

(1) "Manufactured in the United States" means produced by a process in which the manufacturing, final assembly, processing, packaging, testing, and any other process that adds value, quality, or reliability to assembled articles, materials, or supplies, occur in the United States.

(2) "United States" means the United States and any place subject to the jurisdiction of the United States.

Do you claim this preference? ____ YES

Specify line number(s): _____

Specify the location within the United States where this product is manufactured:

(NOTE: If more space is required, include on a separate sheet.)

Signature Authority.

ATTENTION: R.S. 39:1594(C)(4) REQUIRES EVIDENCE OF AUTHORITY TO SIGN AND SUBMIT BIDS TO THE STATE OF LOUISIANA. YOU MUST INDICATE WHICH OF THE FOLLOWING APPLY TO THE SIGNER OF THIS BID.

PLEASE CIRCLE ONE.

1. THE SIGNER OF THIS BID IS EITHER A CORPORATE OFFICER WHO IS LISTED ON THE MOST CURRENT ANNUAL REPORT ON FILE WITH THE SECRETARY OF STATE OR A MEMBER OF A PARTNERSHIP OR PARTNERSHIP IN COMMENDAM AS REFLECTED IN THE MOST CURRENT PARTNERSHIP RECORDS ON FILE WITH THE SECRETARY OF STATE. A COPY OF THE ANNUAL REPORT OR PARTNERSHIP RECORD MUST BE SUBMITTED TO THIS OFFICE BEFORE CONTRACT AWARD.

2. THE SIGNER OF THE BID IS A REPRESENTATIVE OF THE BIDDER AUTHORIZED TO SUBMIT THIS BID AS EVIDENCED BY DOCUMENTS SUCH AS, CORPORATE RESOLUTION, CERTIFICATION AS TO CORPORATE PRINCIPAL, ETC. IF THIS APPLIES A COPY OF THE RESOLUTION, CERTIFICATION, OR OTHER SUPPORTIVE DOCUMENTS SHOULD BE ATTACHED HERETO.

3. THE BIDDER HAS FILED WITH THE SECRETARY OF STATE AN AFFIDAVIT OR RESOLUTION OR OTHER ACKNOWLEDGED/ AUTHENTIC DOCUMENT INDICATING THAT THE SIGNER IS AUTHORIZED TO SUBMIT BIDS FOR PUBLIC CONTRACTS. A COPY OF THE APPLICABLE DOCUMENT SHOULD BE SUBMITTED TO THIS OFFICE BEFORE CONTRACT AWARD.

26. It is the Bidder's responsibility to check the LaPac website frequently for any possible addenda that may be issued. BRCC is not responsible for a Bidder's failure to download any addenda documents required to complete the Invitation to Bid.
27. N/A
28. In accordance with LA Revised Statute 39:1602.1, for a contract for \$100,000 or more and for any contractor with five or more employees, Contractor, or any Subcontractor, shall certify it is not engaging in a boycott of Israel, and shall, for the duration of this contract, refrain from a boycott of Israel.
29. Federal Clauses, if applicable:
- Anti Kickback Clause – The contractor agrees to adhere to the mandate dictated by the Copeland "Anti Kickback" Act which provides that each contractor or subcontractor shall be prohibited from inducing, by any means, any person employed in the completion of work, to give up any part of the compensation to which he is otherwise entitled.
- Clean Air Act – The contractor hereby agrees to adhere to the provisions which require compliance with all applicable standards, orders and requirements issued under section 306 of the clean air act which prohibits the use under non-exempt federal contracts, grants or loans of facilities included on the EPA list of violating facilities.
- Energy Policy and Conservation Act – The contractor hereby recognizes the mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the energy policy and conservation act (P.L. 94-163)
- Clean Water Act – The contractor hereby agrees to adhere to the provisions which require compliance with all applicable standards, orders or requirements issued under section 508 of the clean water act which prohibits the use under non-exempt federal contracts, grants or loans of facilities included on the EPA list of violating facilities.
- Anti-Lobbying and Debarment Act – The contractor will be expected to comply with federal statutes in the anti-lobbying act and the debarment act.

SPECIAL TERMS AND CONDITIONS

1 Special Award:

- All items will be awarded as all or none.
- This is for a one time purchase. A purchase order will be issued to the successful bidder.

2 Delivery Requirements:

-Requested Delivery within 6 weeks after receipt of purchase order. Items should be ordered in early/mid June and must be delivered prior to August 1, 2021.

-Assembly required.

CAN YOU MEET THIS DELIVERY REQUIREMENT? _____

3 Other Instructions:

- Vendor submitting a bid shall be in the business covered herein, either wholesale or retail. Vendor must be authorized distributor for brand quoted.
- Vendor submitting a bid shall be a factory authorized agent for the manufacturer of the equipment quoted.
- If quoting an equal, supply supporting documentation for each item. Supply this information in the sealed bid package.
- In the event a greater or lesser quantity is needed, the right is reserved by BRCC to increase or decrease the amount at the unit price and terms stated in the bid.

4 Successful Bidder delivers to: Baton Rouge Community College
Receiving
201 Community College Drive
Baton Rouge, Louisiana 70806

5 BRCC Point of Contact: Hilary Stephenson - stephensonh@mybrcc.edu

10/2016

BID FORM

Item Number	Description	Quantity	Unit of Measure	Unit Price	Extended Price
1	NURSE ANNE with Sim Pad and Patient Monitor OR EQUAL as per attached specifications	1	EACH		
2	NURSE ANNE Manikin only OR EQUAL as per attached specifications	2	EACH		
3	NURSE KELLY with Sim Pad and Patient Monitor OR EQUAL as per attached specifications	1	EACH		
4	NURSE KELLY Manikin only OR EQUAL as per attached specifications	2	EACH		
5	SimMan Essential with Patient Monitor and Instructor Tablet or equal	1	EACH		
6	SimPad or equal	2	EACH		
	TOTAL BID PRICE:				

Nurse Anne Specifications with Sim Pad and Patient Monitor (Female Manikin) Item # 1

- Nurse Anne or equivalent manikin.
- Head with anatomical landmarks, trachea, and esophagus, along with simulated lungs and stomach
- Mouth and denture care procedures
- Suctioning and insertion of oropharyngeal and nasopharyngeal airways
- Tracheostomy care and tracheal suctioning
- NG tube insertion, medication administration, care, and removal
- Oxygen delivery simulation
- Full range of motion for realistic assessment and care of patient
- Spread fingers and toes to allow for bandaging
- Removable and interchangeable stomas which can simulate colostomy, ileostomy.
- Interchangeable male and female genitalia
- Complete urinary catheterization
- Urinary valves that give natural resistance during catheterization
- IV training arm with replaceable skin and vein system which allow for peripheral IV therapy.
- Venipuncture at multiple sites
- IM sites for injection: vastus lateralis, deltoid, dorsogluteal
- Simulated blood pressure arm with korotkoff sounds, changeable systolic and diastolic blood pressures
- Pulses that can be palpated only when active.
- Pulses synchronized with ECG
- Heart sounds that match ECG.
- Auscultated lung sounds synchronized with breathing.
- Individual selection of lung sounds.
- Bowel sounds that are normal or abnormal.
- Vocal sounds that can be recorded and are computer-generated.
- Functionality that includes time stamps for all activities, vital signs, and notes, and capture in a log.
- Log files that can be viewed on a tablet or PC.
- Scenarios that are able to be uploaded to software.
- Includes patient monitor which will display all vital signs, ECG.
- Includes tablet that allows for instructor to control lung sounds, bowel sounds, heart sounds, and all vital signs.

Nurse Anne Specifications (Female Manikin only) Item # 2

- Nurse Anne or equivalent manikin.
- Head with anatomical landmarks, trachea, and esophagus, along with simulated lungs and stomach
- Mouth and denture care procedures
- Suctioning and insertion of oropharyngeal and nasopharyngeal airways
- Tracheostomy care and tracheal suctioning
- NG tube insertion, medication administration, care, and removal
- Oxygen delivery simulation
- Full range of motion for realistic assessment and care of patient
- Spread fingers and toes to allow for bandaging
- Removable and interchangeable stomas which can simulate colostomy, ileostomy.
- Interchangeable male and female genitalia
- Complete urinary catheterization

- Urinary valves that give natural resistance during catheterization
- IV training arm with replaceable skin and vein system which allow for peripheral IV therapy.
- Venipuncture at multiple sites
- IM sites for injection: vastus lateralis, deltoid, dorsogluteal
- Simulated blood pressure arm with korotkoff sounds, changeable systolic and diastolic blood pressures
- Pulses that can be palpated only when active.
- Pulses synchronized with ECG
- Heart sounds that match ECG.
- Auscultated lung sounds synchronized with breathing.
- Individual selection of lung sounds.
- Bowel sounds that are normal or abnormal.
- Vocal sounds that can be recorded and are computer-generated.
- Functionality that includes time stamps for all activities, vital signs, and notes, and capture in a log.
- Log files that can be viewed on a tablet or PC.
- Scenarios that are able to be uploaded to software.
- Ability to connect to patient monitor to display all vital signs, ECG.
- Ability to connect to tablet or PC that allows for instructor to control lung sounds, bowel sounds, heart sounds, and all vital signs.

Nurse Kelly Specifications with SimPad and Patient Monitor (Male manikin) Item # 3

- Nurse Kelly or equivalent manikin
- Head with anatomical landmarks, trachea, and esophagus, along with simulated lungs and stomach
- Mouth and denture care procedures
- Suctioning and insertion of oropharyngeal and nasopharyngeal airways
- Tracheostomy care and tracheal suctioning
- NG tube insertion, medication administration, care, and removal
- Full range of motion for realistic assessment and care of patient
- Spread fingers and toes to allow for bandaging
- Removable and interchangeable stomas which can simulate colostomy, ileostomy.
- Oxygen delivery simulation
- Interchangeable male and female genitalia
- Complete urinary catheterization
- Urinary valves that give natural resistance during catheterization
- Injection sites include deltoid, thigh, and ventrogluteal
- Articulating IV training arm.
- Replaceable skin and fluid vein system with multiple accessible veins including median, basilica, and cephalic.
- Simulated blood pressure arm with korotkoff sounds, changeable systolic and diastolic blood pressures
- Pulses that can be palpated only when active.
- Pulses synchronized with ECG
- Heart sounds that match ECG.
- Auscultated lung sounds synchronized with breathing.
- Individual selection of lung sounds.
- Bowel sounds that are normal or abnormal.
- Vocal sounds that can be recorded and are computer-generated.
- Functionality that includes time stamps for all activities, vital signs, and notes, and capture in a log.
- Log files that can be viewed on a tablet or PC.
- Scenarios that are able to be uploaded to software.

- Includes patient monitor with touchscreen which will display all vital signs, ECG.
- Includes tablet that allows for instructor to control lung sounds, bowel sounds, heart sounds, and all vital signs.

Nurse Kelly (Male Manikin only) Item # 4

Nurse Kelly or equivalent manikin

- Head with anatomical landmarks, trachea, and esophagus, along with simulated lungs and stomach
- Mouth and denture care procedures
- Suctioning and insertion of oropharyngeal and nasopharyngeal airways
- Tracheostomy care and tracheal suctioning
- NG tube insertion, medication administration, care, and removal
- Full range of motion for realistic assessment and care of patient
- Spread fingers and toes to allow for bandaging
- Removable and interchangeable stomas which can simulate colostomy, ileostomy.
- Oxygen delivery simulation
- Interchangeable male and female genitalia
- Complete urinary catheterization
- Urinary valves that give natural resistance during catheterization
- Injection sites include deltoid, thigh, and ventrogluteal
- Articulating IV training arm.
- Replaceable skin and fluid vein system with multiple accessible veins including median, basilica, and cephalic.
- Simulated blood pressure arm with korotkoff sounds, changeable systolic and diastolic blood pressures
- Pulses that can be palpated only when active.
- Pulses synchronized with ECG
- Heart sounds that match ECG.
- Auscultated lung sounds synchronized with breathing.
- Individual selection of lung sounds.
- Bowel sounds that are normal or abnormal.
- Vocal sounds that can be recorded and are computer-generated.
- Functionality that includes time stamps for all activities, vital signs, and notes, and capture in a log.
- Log files that can be viewed on a tablet or PC.
- Scenarios that are able to be uploaded to software.
- Ability to connect to patient monitor touchscreen which can display all vital signs, ECG in realtime.
- Includes tablet that allows for instructor to control lung sounds, bowel sounds, heart sounds, and all vital signs.

SimMan Essential with Patient Monitor and Instructor Tablet Item # 5

- SimMan Essential manikin with Patient Monitor and Instructor Tablet or Equivalent
- Wireless functionality for manikin.
- Open/closed airway can be automatically or manually controlled.
- Head tilt/chin lift functionality.
- Jaw thrust with articulated jaw.
- Oral and Nasopharyngeal suctioning.
- Ventilation via bag-mask
- Nasotracheal and orotracheal intubation
- Endotracheal intubation.
- Variable airway resistance
- Stomach distention

- Able to simulated airway complications such as: can't intubate or ventilate, proper head position detection, tongue edema, laryngospasm
- Realistic breathing with chest rise/fall
- CO2 exhalation
- Normal and abnormal breath sounds in multiple quadrants anterior and posterior.
- Able to simulate breathing complications using unilateral and bilateral chest movement, unilateral bilateral, and lobar breath sounds.
- Extensive library of ECG rhythms that can be adjusted in realtime.
- Heart sounds in at least 4 locations anteriorly.
- ECG rhythm monitoring in real time.
- 12 lead ECG display
- Defibrillation, cardioversion, and pacing.
- Carotid, brachial radial, femoral, dorsalis pedis, and posterior tibialis pulses that all syncrhonize with ECG.
- Variable pulse strength with Blood Pressure.
- Manikin allows for venipuncture and IV infusion.
- CPR compressions generate palpable pulses, blood pressure wave form, and ECG artifacts.
- Compression depth and resistance that is realistic.
- Detection of depth, release and frequency or compressions so instructor can assess if student correctly administering compressions.
- Hand position sensor
- Eyes blink slow, normal, and fast.
- Eyes can be set to open, closed, and partially open.
- Pupillary accommodation: synchrony/asynchrony, normal and sluggish speed of response.
- Complete foley catheterization with urine reservoir
- Bowel sounds normal and abnormal for all four quadrants.
- Pre-recorded voice sounds and recordable voice sounds.
- Instructor is able to simulate patient's voice wirelessly.
- Legs should rotate in all directions.
- Wireless instructor computer that can communicate with manikin.
- Manual mode for instructor tablet that allows instructor to change all parameters in real-time.
- Automatic mode functionality for manikin and tablets/patient monitor that allows for pre-programmed scenarios.
- Activities time stamped including vital signs, instructor comments, assessment findings.
- Touch-screen patient monitor that provides clinical feedback for vital signs, other physiological parameters.
- Simulated parameters for touch-screen monitor include ECG, SpO2, CO2, ABP, CVP, PAP, NIP, TOF, Cardiac Output, Temperature
- X-Ray Display on patient monitor
- 12 lead ECG on patient monitor.
- Custom image and video display on patient monitor
- Oxygen saturation and waveform.

SimPad Item # 6

- Tablet that connects wirelessly to manikins and can adjust manikin vital signs, physiologica parameters manually.
- At least 5.7" in display size.

- Accurate blood pressure simulation including: korotkoff sounds synchronized with programmable ECG, systolic and diastolic pressures that can be individually set, pressure accuracy at least +/- 4 mmHg, calibration function to adjust pressure sensor and cuff gauge
- Controls manikin carotid, brachial, radial pulses.
- Pulses functionality include: active only when palpated, multiple pulse strength options, brachial pulse becomes absent if cuff above 20 mmHg, radial pulse becomes absent when BP pressure is above systolic BP level.
- Sounds include: heart sounds synchronized with ECG, auscultated lung sounds that are also synchronized with breathing, individual lung sounds selection, normal or abnormal bowel sounds, computer-generated and recordable voice sounds with real time voice input by headset.
- 3-4 lead ECG functionality with extensive ECG library.
- Activities vital signs, and notes are timestamped with the log files able to be viewed on a PC.
- Pre-programmed scenarios able to be uploaded to tablet.
- Rechargeable battery with at least 3-4 hours of operating time.